10/529563

● COPY FOR IB

Rec'd CT/PTO 28 MAR 2005

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Artcle 36 and Rule 70)

Applicant's or agent's file reference FPM03008-PCT	**FOR FURTHER ACTION**	SeeNotificationofTransmittalofInternationalPreliminary Examination Report (Form PCT/IPEA/416)

International application No. **PCT/KR2003/001952**	International filing date*(day/month/year)* **25 SEPTEMBER 2003 (25.09.2003)**	Priority date *(day/month/year)* 28 SEPTEMBER 2002 (28.09.2002)

International Patent Classification (IPC) or national classification and IPC

IPC7 G06F 17/60

Applicant

MQUAY INC. et al

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of _____4_____ sheets, including this cover sheet.

   [X] This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of _____5_____ sheets.

3. This report contains indications relating to the following items:

   I   [X] Basis of the report

   II [ ] Priority

   III [ ] Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

   IV [ ] Lack of unity of invention

   V   [X] Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

   VI [ ] Certain documents cited

   VII [ ] Certain defects in the international application

   VIII [ ] Certain observations on the international application

Date of submission of the demamd **27 FEBRUARY 2004 (27.02.2004)**	Date of completion of this report 21 DECEMBER 2004 (21.12.2004)

Name and mailing address of the IPEA/KR Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer PARK, Sung Woo Telephone No. 82-42-481-5790

Form PCT/IPEA/409 (cover sheet) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

I. Basis of the report

1. With regard to the elements of the international application:*

   ☐ the international application as originally filed

   ☒ the description:
   pages __1-14_____ , as originally filed
   pages _____ , filed with the demand
   pages _____ , filed with the letter of _____

   ☒ the claims:
   pages _____ , as originally filed
   pages _____ , as amended (together with any statment) under Article 19
   pages _____ , filed with the demand
   pages __15-19_____ , filed with the letter of __21/09/2004____

   ☒ the drawings:
   pages __1/13-13/13_____ , as originally filed
   pages _____ , filed with the demand
   pages _____ , filed with the letter of _____

   ☐ the sequence listing part of the description:
   pages _____ , as originally filed
   pages _____ , filed with the demand
   pages _____ , filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
   These elements were available or furnished to this Authority in the following language ___English___ which is

   ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

   ☒ the language of publication of the international application(under Rule 48.3(b)).

   ☐ the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/ or 55.3).

3. With regard to any **nucleotide** and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐ contained inthe international application in written form.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority in written form.

   ☐ furnished subsequently to this Authority in computer readable form

   ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disc losure in the international applicationas as filed has been furnished.

   ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

   ☐ the description, pages _____

   ☒ the claims, Nos. __4, 7_____

   ☐ the drawings, sheets _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)).**

---

* *Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).*

** *Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.*

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-3, 5-6, 8-14		YES
	Claims			NO
Inventive step (IS)	Claims	1-3, 8, 10		YES
	Claims	5-6, 9, 11-14		NO
Industrial applicability (IA)	Claims	1-3, 5-6, 8-14		YES
	Claims			NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D : WO 00/49586 A1 (24 AUGUST 2000)

1. Novelty

The subject matter of Claims 1-3, 5-6 and 8-14 is novel over the available prior art (Article 33(2) PCT).

2. Inventive Step

D relates to a credit card system to be used as a payment means when purchasing a product by issuing a limited use credit card number additionally connected to a user's master credit card.

Claims 5-6 of the present invention relate to a virtual credit card system for a commercial payment by issuing a virtual credit card system which includes purchase money and a purchasing term. the technique of using a credit card number in which usage money and a usage term are limited is the same as that of the present invention's virtual cash card, excepting only that the expression is different. Therefore, Claims 5-6 of the present invention are not considered to involve an inventive step.

Claim 9 of the present invention is the method invention of Claim 5 and differs only in the category. They are the same in reality; therefore, Claim 9 of the present invention is not considered to involve an inventive step.

Claims 11-14 of the present invention relate to a virtual card service system characterized by a plurality of virtual cards. A user's card which is connected to a master card is issued by designating a usage condition when a virtual card, in which usage money and usage term are limited, is issued. However, D discloses a technique for registering and using a plurality limited use card numbers connected to one master card(page 19, line 16-28, Fig. 2). Therefore, Claims 11-14 of the present invention are not considered to involve an inventive step.

(Continued on Supplemental Sheet.)

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

BOX V.

Therefore, Claims 5-6, 9 and 11-14 of the present invention are easy for a person skilled in the art to arrive at from D. Accordingly, the invention is not considered to involve an inventive step.

3. Industrial Applicability
Claims 1-3, 5-6 and 8-14 of the present invention are considered to be industrially applicable.

Claims

1.   A virtual card service system comprising:

a mobile communication terminal for transmitting an amount of withdrawal money and a

5   withdrawing term for a virtual cash card to the virtual card service system;

a virtual cash card system for receiving the amount of withdrawal money and the withdrawing term from the mobile communication terminal, verifying whether the withdrawal money is deposited in a parent account corresponding to the virtual cash card, storing information on the amount of withdrawal money and withdrawing term if the withdrawal money is deposited

10 in the parent account, and informing the mobile communication terminal of authentication; and

an ATM for receiving a virtual cash card identifying information, verifying whether the information is within the withdrawing term stored in the virtual cash card system, and withdrawing the amount of withdrawal money from the parent account.

15 2.   The virtual card service system as claimed in claim 1, wherein if a withdrawal request is not performed through the virtual cash card identifying information, the virtual cash card system requests monetary facilities so that the stored amount of withdraw money is not withdrawn from the parent account during the stored withdraw term.

20 3.   The virtual card service system as claimed in claim 1, wherein the virtual cash card identifying number is inputted through a wireless communication of the terminal, is read from a bar-code, a magnetic tape or an IC chip, which are attached to the terminal, or is inputted by a key input of a client.

25 4.   The virtual card service system as claimed in claim 1, wherein if the amount of withdrawal money and the withdrawing term are provided from the terminal, the virtual cash card

15

system adds the amount of withdrawal money and the withdrawing term into information on a

virtual cash card of which an amount of withdrawal money and a withdrawing term are initialized,

and initializes the amount of withdrawal money and the withdrawing term of the virtual cash card

information, if the amount of withdrawal money is withdrawn within the withdrawing term or the

5   withdrawing term is expired.

5.   A virtual card service system comprising:

a mobile communication terminal for transmitting an amount of purchase money and a

purchasing term for a virtual credit card to the virtual card service system;

10   a virtual credit card system for receiving the amount of purchase money and the

purchasing term from the mobile communication terminal, authenticating a parent credit card

corresponding to the virtual credit card, storing information on the amount of purchase money

and purchasing term if the authentication is successful, and informing the mobile communication

terminal of the authentication; and

15   a credit card reader for receiving a virtual credit card identifying information, verifying

whether the information is within the withdrawing term stored in the virtual credit card system,

and paying the amount of purchase money using the parent credit card.

6.   The virtual card service system as claimed in claim 5, wherein the virtual credit card

20   identifying information is inputted through a wireless communication of the terminal, is read

from a bar-code, a magnetic tape or an IC chip, which are attached to the terminal, or is inputted

by a key input of a client.

7.   The virtual card service system as claimed in claim 5, wherein if the amount of purchase

25   money and the purchasing term are provided from the terminal, the virtual credit card system

adds the amount of purchase money and the purchasing term into information on a virtual credit

16

card of which an amount of purchase money and a purchasing term are initialized, and initializes the amount of purchase money and the purchasing term of the virtual credit card information, if the amount of purchase money is withdrawn within the purchasing term or the purchasing term is expired.

5

8.   A virtual card service method comprising the steps of:

transmitting an amount of withdrawal money and a withdrawing term for a virtual cash card to a virtual cash card system through a user terminal;

if the amount of withdrawal money and the withdrawing term are provided to the virtual

10   cash card system, verifying whether the withdrawal money is deposited in a parent account corresponding to the virtual cash card, storing information on the amount of withdrawal money and withdrawing term if the withdrawal money is deposited in the parent account, and informing the user terminal of authentication; and

if a virtual cash card identifying information is inputted to an ATM after informing of the

15   authentication, verifying whether the information is within the stored withdrawing term, and withdrawing the amount of withdrawal money from the parent account if the information is within the stored withdrawing term.

9.   A virtual card service method comprising the steps of:

20   transmitting an amount of purchase money and a purchasing term for a virtual credit card to a virtual credit card system through a user terminal;

if the amount of purchase money and the purchasing term are provided to the virtual credit card system, authenticating a parent credit card corresponding to the virtual credit card, storing information on the amount of purchase money and purchasing term if the authentication is

25   successful, and informing the user terminal of the authentication; and

if a virtual credit card identifying information is inputted to a credit card reader, verifying

17

whether the information is within the withdrawing term stored in the virtual credit card system, and paying the amount of purchase money using the parent credit card.

10.   A virtual card service method comprising the steps of:

5   transmitting an amount of purchase money and a purchasing term for a virtual credit card and information on a member shop to a virtual credit card system through a user terminal;

if the amount of purchase money, the purchasing term and the information on member shop are provided to the virtual credit card system, authenticating the member shop corresponding to the information on the member shop and a parent credit card corresponding to

10   the virtual credit card, storing information on the amount of purchase money and purchasing term if the authentication is successful, and informing the user terminal of the authentication; and

instructing the credit card reader installed in the member shop to print a sales slip containing purchasing particulars, after the authentication.

15   11.   A virtual card service system comprising:

a user terminal for transmitting an amount of usage money and a using term for any one of a plurality of virtual cards from a user of a master card among a plurality of virtual cards assigned to one parent account or one parent credit card to the virtual card service system;

a virtual card system for receiving the amount of usage money and the using term for the

20   selected virtual card from the user terminal, authenticating the parent account or the parent credit card corresponding to the master card, storing information on the amount of usage money and using term for the selected virtual card if the authentication is successful, and informing the user terminal of the authentication; and

a card service machine for receiving an identifying information on the selected virtual

25   card, verifying whether the information is within the using term stored in the virtual card system, and withdrawing or paying the amount of usage money.

18

12.   The virtual card service system as claimed in claim 11, wherein the user terminal transmits the selected amount of usage money and the selected using term for the virtual card in question according to an authentication request from any one of the plurality of virtual cards.

5

13.   A virtual card service method comprising the steps of:

transmitting a selected amount of usage money and a selected using term for any one of a plurality of virtual cards assigned to one parent account or one parent credit card from a user terminal of a master card to the virtual card service system;

10   receiving the amount of usage money and the using term for the selected virtual card from the user terminal, authenticating the parent account or the parent credit card corresponding to the master card, storing information on the amount of usage money and using term for the selected virtual card if the authentication is successful, and informing the user terminal of the authentication; and

15   receiving identifying information on the selected virtual card, verifying whether the information is within the using term stored in the virtual card system, and withdrawing or paying the amount of usage money.

14.   The virtual card service method as claimed in claim 13, wherein the user terminal

20   transmits the selected amount of usage money and the selected using term for the virtual card in question according to an authentication request from any one of the plurality of virtual cards.